



PATENT  
Customer No. 22,852  
Attorney Docket No. 10189.0001

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method of inspecting an electrical characteristic of a to-be-inspected object, comprising:  
bringing pairs of probe pins into contact with respective electrodes of at least one to-be-inspected object;  
simultaneously applying a voltage to the respective inspection electrodes via the pairs of probe pins by power supplies drivers connected to the respective pairs of probe pins, thereby causing a fritting phenomenon, in which a predetermined potential inclination is formed and a current flows to break an oxide film, to occur between tips of each pair included in the pairs of probe pins; and  
applying an inspection signal from the drivers to the electrodes of the to-be-inspected object via the respective pairs of probe pins, thereby inspecting an electrical characteristic of the to-be-inspected object by a tester.

2. (Currently Amended) The method according to claim 1, wherein:  
~~the inspecting the electrical characteristic of the to-be-inspected object is performed by a tester circuit, the tester circuit transmitting the driver transmits the inspection signal via respective electrical connection lines connecting the tester circuit driver to the respective probe pins included in the pairs of~~

probe pins; and

~~the power supplies are formed of respective drivers provided in the tester circuit, respective drivers applying~~ apply a voltage, which causes a fritting phenomenon, to the respective electrodes via the electrical connection lines and the respective pairs of probe pins.

3. (Currently Amended) The method according to claim 2, wherein the applying the voltage by ~~the power supplies drivers~~ which[[ is]] are connected to the respective pairs of probe pins to the respective electrodes via the electrical connection lines and the respective pairs of probe pins includes ~~one process included in a process of simultaneously applying the voltage to the electrodes, and a process of sequentially applying the voltage to the electrodes instead of simultaneously applying the voltage to the electrodes.~~

4. (Currently Amended) The method according to claim[[ 3]]2, wherein when the voltage applied by ~~the power supplies drivers~~ to the respective electrodes reaches a predetermined limit value, when a current resulting from the voltage reaches a predetermined limit value, ~~when the voltage shows a predetermined change, or when the current shows a predetermined change, application of the voltage to the electrodes by the drivers~~ is stopped.

5. (Currently Amended) An apparatus for inspecting an electrical characteristic of a to-be-inspected object, comprising:

pairs of probe pins to be brought into contact with respective electrodes of at least one to-be-inspected object;

~~power supplies~~ drivers connected to the respective pairs of probe pins to simultaneously apply a voltage to the respective electrodes, a fritting phenomenon, in which a predetermined potential inclination is formed and a current flows to break an oxide film, occurring between tips of each pair included in the pairs of probe pins, as a result of application of the voltage; and

a tester which transmits, after the fritting phenomenon occurs, an inspection signal to the electrodes of the to-be-inspected object, thereby inspecting an electrical characteristic of the to-be-inspected object.

6. (Currently Amended) The apparatus according to claim 5, further comprising:

~~a tester which transmits an inspection signal to the electrodes of the to-be-inspected object, thereby inspecting the electrical characteristic of the to-be-inspected object;~~

pairs of probe pins to be brought into contact with the respective electrodes; electrical connection lines connecting the ~~tester~~ driver to the respective pairs of probe pins;

~~a plurality of~~ the drivers provided in the tester, circuit, the drivers being connected to the respective pairs of probe pins to apply the drivers applying a voltage, which causes a fritting phenomenon to the respective electrodes, and wherein the electrical connection lines transmit the inspection signal from the tester and the voltage from the

drivers to the respective electrodes of the to-be-inspected object.

7. (Currently Amended) The apparatus according to claim 6, further comprising:

~~switch mechanisms provided between the respective drivers and the respective pairs of probe pins, the switch mechanisms being voltage switching mechanisms which enable one process included in a process of simultaneously applying the voltage to the electrodes, and a process of sequentially applying the voltage to the electrodes~~ wherein the driver is provided in the tester, and has a function of sequentially applying a voltage to the respective electrodes in addition to simultaneously applying a voltage to the respective electrodes.

8. (Currently Amended) The apparatus according to claim 7, further comprising:

comparators connected between the respective drivers and the respective pairs of probe pins, the comparators detecting at least one of whether the voltage applied by the ~~power supplies~~ drivers to the respective electrodes reaches a predetermined limit value, whether a current resulting from the voltage reaches a predetermined limit value, and whether the current shows a predetermined change,

and wherein when the comparators detect whether one of the voltage and a current reaches the predetermined limit value, the ~~switch mechanisms~~ drivers stop application of the voltage to the probe pins ~~by the drivers~~.

9. (New) A method of inspecting an electrical characteristic of a to-be-inspected object, comprising:

bringing pairs of probe pins into contact with respective electrodes of at least one to-be-inspected object;

sequentially applying a voltage to the respective inspection electrodes via the pairs of probe pins by drivers connected to the respective pairs of probe pins, thereby causing a fritting phenomenon, in which a predetermined potential inclination is formed and a current flows to break an oxide film, to occur between tips of each pair included in the pairs of probe pins; and

applying an inspection signal by the respective drivers to the electrodes of the to-be-inspected object via the respective pairs of probe pins, thereby inspecting an electrical characteristic of the to-be-inspected object by a tester, wherein each driver transmits the inspection signal and the voltage via electrical connection lines connecting the driver to the respective probe pins included in the pairs of probe pins.

10. (New) The method according to claim 9, wherein when the voltage applied by the drivers to the respective electrodes reaches a predetermined limit value, when a current resulting from the voltage reaches a predetermined limit value or when the current shows a predetermined change, application of the voltage to the electrodes by the drivers is stopped.